

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims**

- 1        1. (original)    A method of executing tasks in a multi-processor system, comprising:  
2                    executing a device driver to select a processor to execute an interrupt handler task; and  
3                    executing an operating system scheduler to assign an interrupt handler task to said processor  
4                    selected by said device driver.
  
  - 1        2. (original)    The method of claim 1 further comprising operating the processor selected by  
2                    said device driver and assigned by said operating system scheduler to execute an interrupt handler task in  
3                    response to an interrupt.
  
  - 1        3. (original)    The method of claim 1 wherein said device driver executing includes a first  
2                    monitoring of usage of a plurality of processors in said system and selecting, as a function of said first  
3                    monitoring, a processor as the currently selected processor to execute an interrupt handler task.
  
  - 1        4. (original)    The method of claim 3 wherein said device driver executing includes a second  
2                    monitoring of usage of a plurality of processors in said system and selecting, as a function of said second  
3                    monitoring, either the currently selected processor or a different processor to execute an interrupt handler  
4                    task.
  
  - 1        5. (original)    The method of claim 4 wherein said device driver executing includes identifying  
2                    the processor with the lowest usage, comparing the usage of the lowest usage processor to the usage of the  
3                    currently selected processor and selecting the lowest usage processor to execute an interrupt handler task if  
4                    the usage of the currently selected processor exceeds the usage of the lowest usage processor.
  
  - 1        6. (original)    The method of claim 4 wherein said device driver executing includes identifying  
2                    the processor with the lowest usage, comparing the usage of the lowest usage processor to the usage of the  
3                    currently selected processor and selecting the lowest usage processor to execute an interrupt handler task if  
4                    the usage of the currently selected processor exceeds the usage of the lowest usage processor by a  
5                    predetermined margin of usage.

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1           7. (original)   The method of claim 4 wherein said device driver executing includes selecting  
2   the currently selected processor to execute an interrupt handler task if the usage of the currently selected  
3   processor is the lowest.

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1           8. (original)   The method of claim 5 wherein said device driver executing includes selecting  
2   the currently selected processor to execute an interrupt handler task if the usage of the currently selected  
3   processor exceeds the usage of the lowest usage processor by less than a predetermined margin of usage.

1           9. (original)   A system in communication with data storage, comprising:  
2         a plurality of processors;  
3         a storage controller adapted to manage Input/Output (I/O) access to the data storage;  
4         a device driver capable of execution by at least one processor to select one processor to execute an  
5   interrupt handler task; and  
6         an operating system scheduler capable of execution by at least one processor to assign an interrupt  
7   handler task to said processor selected by said device driver.

1           10. (original)   The system of claim 9, further comprising:  
2         an interrupt handler task capable of execution by the selected processor in response to an interrupt.

1           11. (original)   The system of claim 9 wherein said device driver is capable of execution by at  
2   least one processor to monitor usage of a plurality of processors in said system and to select, as a function  
3   of said monitoring, a processor as the currently selected processor to execute an interrupt handler task.

1           12. (original)   The system of claim 11 wherein said device driver is capable of execution by at  
2   least one processor to subsequently monitor usage of a plurality of processors in said system and to select,  
3   as a function of said subsequent monitoring, either the currently selected processor or a different processor  
4   to execute an interrupt handler task.

1           13. (original)   The system of claim 12 wherein said device driver is capable of execution by at  
2   least one processor to identify the processor with the lowest usage, to compare the usage of the lowest  
3   usage processor to the usage of the currently selected processor and to select the lowest usage processor to  
4   execute an interrupt handler task if the usage of the currently selected processor exceeds the usage of the  
5   lowest usage processor.

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1        14. (original)    The system of claim 12 wherein said device driver is capable of execution by at  
2 least one processor to identify the processor with the lowest usage, to compare the usage of the lowest  
3 usage processor to the usage of the currently selected processor and to select the lowest usage processor to  
4 execute an interrupt handler task if the usage of the currently selected processor exceeds the usage of the  
5 lowest usage processor by a predetermined margin of usage.

1        15. (original)    The system of claim 12 wherein said device driver is capable of execution by at  
2 least one processor to select the currently selected processor to execute an interrupt handler task if the  
3 usage of the currently selected processor is the lowest.

1        16. (original)    The system of claim 13 wherein said device driver is capable of execution by at  
2 least one processor to select the currently selected processor to execute an interrupt handler task if the  
3 usage of the currently selected processor exceeds the usage of the lowest usage processor by less than a  
4 predetermined margin of usage.

1        17. (original)    An article of manufacture including a device driver, wherein the device driver  
2 executes in an operating system having an operating system scheduler and interrupt task handler, capable of  
3 executing tasks in a multi-processor system, wherein the device driver causes operations to be performed,  
4 the operations comprising:

5              selecting a processor to execute an interrupt handler task, wherein the operating system schedule  
6 assigns the interrupt handler task to said processor selected by said device driver.

1        18. (original)    The article of manufacture of claim 17 wherein said device driver operations  
2 include a first monitoring of usage of a plurality of processors in said system and selecting, as a function of  
3 said first monitoring, a processor as the currently selected processor to execute an interrupt handler task.

1        19. (original)    The article of manufacture of claim 18 wherein said device driver operations  
2 include a second monitoring of usage of a plurality of processors in said system and selecting, as a function of  
3 said second monitoring, either the currently selected processor or a different processor to execute an  
4 interrupt handler task.

1        20. (original)    The article of manufacture of claim 19 wherein said device driver operations  
2 include identifying the processor with the lowest usage, comparing the usage of the lowest usage processor  
3 to the usage of the currently selected processor and selecting the lowest usage processor to execute an

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4 interrupt handler task if the usage of the currently selected processor exceeds the usage of the lowest usage  
5 processor.

1           21. (original)   The article of manufacture of claim 19 wherein said device driver operations  
2 include identifying the processor with the lowest usage, comparing the usage of the lowest usage processor  
3 to the usage of the currently selected processor and selecting the lowest usage processor to execute an  
4 interrupt handler task if the usage of the currently selected processor exceeds the usage of the lowest usage  
5 processor by a predetermined margin of usage.

1           22. (original)   The article of manufacture of claim 19 wherein said device driver operations  
2 include selecting the currently selected processor to execute an interrupt handler task if the usage of the  
3 currently selected processor is the lowest.

1           23. (original)   The article of manufacture of claim 20 wherein said device driver operations  
2 include selecting the currently selected processor to execute an interrupt handler task if the usage of the  
3 currently selected processor exceeds the usage of the lowest usage processor by less than a predetermined  
4 margin of usage.